

WHAT IS CLAIMED:

1 1. A method for assessing risk of a neurodegenerative disease or
2 disorder in a subject, which method comprises comparing a level of anti- β -amyloid-42
3 ($A\beta_{42}$) antibody in a biological sample from a subject to a normal level, wherein a
4 lower level in the biological sample from the subject indicates the presence of a
5 neurodegenerative disease or disorder.

1 2. The method according to claim 1, wherein the biological sample is
2 blood, serum, or plasma.

1 3. The method according to claim 1, wherein the normal level is
2 determined from an average of the level of anti- $A\beta_{42}$ peptide antibody in the biological
3 sample from a population of age-matched normal subjects who do not show any
4 symptoms of neurodegenerative disease or disorder.

1 4. The method according to claim 1, wherein the normal level is
2 determined from an average of the level of anti- $A\beta_{42}$ peptide antibody in the biological
3 sample from a population of all subjects, including subjects who do not show any
4 symptoms of a neurodegenerative disease or disorder.

1 5. The method according to claim 1, which comprises determining
2 the level of anti- $A\beta_{42}$ antibody in the biological sample by immunoassay.

1 6. The method according to claim 5, wherein the immunoassay is
2 an enzyme-linked immunosorbent assay.

1 7. The method according to claim 1, wherein assessing risk is
2 diagnosing.

1 8. The method according to claim 2, wherein the subject is from a
2 family that has a member or members with familial Alzheimer's Disease.

1 9. The method according to claim 1, wherein the subject is in his or
2 her seventh or eighty decade.

1 10. A method for assessing risk of Alzheimer's Disease in a subject,
2 which method comprises comparing a level of anti-A β_{42} antibody in a biological
3 sample from a subject to a normal level, wherein a lower level in the biological sample
4 from the subject indicates the presence of Alzheimer's Disease.

1 11. The method according to claim 10, wherein the biological sample
2 is blood, serum, or plasma.

1 12. The method according to claim 10, wherein the normal level is
2 determined from an average of the level of anti-amyloid peptide antibody in the
3 biological sample from a population of age-matched normal subjects who do not show
4 any symptoms of Alzheimer's Disease.

1 13. The method according to claim 10, wherein the normal level is
2 determined from an average of the level of anti-amyloid peptide antibody in the
3 biological sample from a population of all subjects, including subjects who do not
4 show any symptoms of Alzheimer's Disease.

1 14. The method according to claim 10, which comprises determining

2 the level of anti-amyloid peptide antibody in the biological sample by immunoassay.

1 15. The method according to claim 10, wherein the subject is from a
2 family that has a member or members with familial Alzheimer's Disease.

1 16. A method for assessing risk of Alzheimer's Disease in a subject,
2 which method comprises comparing a level of anti-A β_{42} antibody in a biological
3 sample, wherein the subject does not exhibit symptoms of cognitive dysfunction or
4 memory dysfunction from a subject to a normal level, wherein a lower level in the
5 biological sample from the subject indicates the presence of Alzheimer's Disease.

1 17. The method according to claim 2, wherein the subject is from a
2 family that has a member or members with familial Alzheimer's Disease.

1 18. The method according to claim 16, wherein the subject is in his
2 or her seventh or eighth decade.

1 19. A method for treating or preventing the onset of Alzheimer's
2 Disease, which method comprises administering a therapeutically effective amount of
3 a human anti-A β_{42} antibody to a subject believed to suffer from or be at risk for
4 developing Alzheimer's Disease.

1 20. The method according to claim 19, wherein the antibody is a
2 monoclonal antibody.

1 21. The method according to claim 20, wherein the monoclonal
2 antibody is a humanized antibody.

1 22. A method for treating or preventing the onset of Alzheimer's
2 Disease, which method comprises administering a therapeutically effective amount of
3 a human anti-A β_{42} antibody to a subject believed to suffer from or be at risk for
4 developing Alzheimer's Disease, wherein the therapeutically effective amount of the
5 antibody is an amount that provides a level of the antibody in a biological sample from
6 the subject that is at least the same as a normal level.

1 23. The method according to claim 22, wherein the level of the
2 antibody in a biological sample from the subject is greater than the normal level.

1 24. The method according to claim 19, which further comprises
2 determining the level of anti-amyloid peptide antibody in the biological sample by
3 immunoassay.
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1 25. The method according to claim 24, wherein the immunoassay
2 is an enzyme-linked immunosorbent assay.

1 26. The method according to claim 24, wherein the biological sample
2 is blood, serum, or plasma.

1 27. The method according to claim 14, wherein the normal level is
2 determined from an average of the level of anti-amyloid peptide antibody in the
3 biological sample from a population of age-matched normal subjects who do not show
4 any symptoms of the Alzheimer's Disease.

1 28. The method according to claim 24, wherein the normal level is
2 determined from an average of the level of anti-amyloid peptide antibody in the

- 3 biological sample from a population of all subjects, including subjects who do not
4 show any symptoms of the Alzheimer's Disease.

1 29. The method according to claim 19, wherein the subject is from
2 a family with a member or members with familial Alzheimer's Disease.

1 30. A method for diagnosing Alzheimer's Disease, which method
2 comprises detecting binding of a natural anti-amyloid antibody to amyloid in a brain of
3 a subject suspected of suffering Alzheimer's Disease.

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